

The National Academy of Sciences recommends daily calcium intakes of 1000-1200 mg per day for adult men and women.



Food is the best source of calcium; however, many Americans still do not get enough calcium in their diets. Calcium fortified food and calcium supplements can fill the gap, ensuring that the daily calcium requirement is met.

The calcium found in foods and supplements occur in a compound form. During digestion, the compound dissolves and becomes available to be absorbed in the blood. Supplements are best absorbed when taken in divided doses. **Calcium that is found in a compound is called Elemental Calcium.** Several different compounds are used in supplements, including calcium carbonate, calcium citrate, calcium phosphate, calcium gluconate and calcium lactates.

However, not all calcium supplements are created equal. The percent of **Elemental Calcium** found in a supplement can vary greatly depending on the type of compound used. **Elemental Calcium** is highest in calcium carbonate (40%) and lowest in calcium gluconate (9%). This is the **Absorption Availability** of **Elemental Calcium**.

The **Elemental Calcium** absorption percentages in the different compounds is as follows:

- Calcium Carbonate: 40%**
- Calcium Phosphate (tribasic): 38%**
- Calcium Citrate: 21%**
- Calcium Lactate: 13%**
- Calcium Gluconate: 9%**

To calculate the amount of **Elemental Calcium** in a supplement you need to know the kind of calcium used and the number of milligrams it contains.

For example for 1 Pill:
Calcium Citrate @ 500 mg
1 pill = 500 mg x .21 (21%) =
105 mg of Elemental Calcium

Therefore

To Get 1000 mg **Elemental Calcium** with **Calcium Citrate** supplement @ 500 mg per pill (105 mg **EC**):

You would need to have 10 pills / day to get 1000 mg!

HOWEVER

To Get 1000 mg of **Elemental Calcium** with **Calcium Carbonate** supplement @ 650 mg per pill (260 mg **EC**):

You would need ONLY 4 pills / day to meet 1000 mg.

Gluconate and Lactate are generally not recommended for supplementation since they have a low percentage of Elemental Calcium

The best nutritional strategy for promoting optimal health and reducing the risk of chronic disease is to choose a wide variety of foods. Additional calcium from a supplement can help some people with their needs.



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Reference: NIH Consensus Development Conference on Optimal Calcium Intake (1994)

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**How Much
Calcium is
Really in that
Supplement?**



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